

Species Management Plan
Common Teasel
Dipsacus fullonum

Life History/ Identification: Teasels are biennial plants that grow to a height of six feet and have a deep taproot. During the first year of growth, the plant forms a rosette. The leaves of the rosette are joined at the bases. This allows the plant to catch and hold water from precipitation. During the second year the rosette dies and the second year plant grows to a height of six feet. Leaves along the stem are arranged oppositely on the stems, are lance shaped and can be as long as 10 inches. The leaves have stiff prickles along the midrib on the underside. The leaves are fused at the stem. The stems have a series of striations (shallow ridges) that have a series of downward turned prickles. The flowers are lavender or purple and occur in spiny heads. The flowers are protected by spiny bracts. There is a series of protruding upward curving spines below the flower head. Teasel can form large monocultures in areas where it grows.

Status: Teasel is not currently recognized as a noxious weed on the Coconino, Kaibab and Prescott National Forests list, Arizona Noxious Weed List or on the Federal Noxious Weed List. However, this is an invasive exotic plant and should be considered when preparing Noxious Weed Management Plans.

Flagstaff Localities:

Currently there are only a few isolated populations of common teasel in Northern Arizona. One of these is within the city of Flagstaff in drainage behind a mobile home park and another group of plants was found near a stock tank on Forest Service property. Teasel has become a widespread weed in many parts of the country including the Midwest and Northwest. It has spread rapidly through the northwest in wet areas such as drainage ditches and irrigation canals.

Economic Impact: Common teasel (*Dipsacus fullonum*) and a related species cut-leaved teasel (*D. laciniatus*) have rapidly expanded in other areas of the country. Dramatic increases in the range of both common and cut leaved teasel have been seen in the Midwest states. In some of these areas teasel plants sometimes occurs in prairies, savannas, and meadows. In Oregon the plants are found in many areas including meadows and drainage ditches where they form large monocultures. Currently, the known groups of teasel in Northern Arizona are small and cover limited areas. However, these or other undetected populations could expand into larger areas and impact native communities. Teasel is often used in dried flower arrangements and this may help contribute to its spread around populated areas. Dried flowers are sometimes discarded outside after use. This can be a potential for introduction of several species included in dried flower arrangements if the seeds are mature. Activities such as mowing and highway maintenance can contribute to the spread of teasel where it occurs along roadways

Control:

1. Cultural Control

Prevention of more introductions of this into native ecosystems will help control it. Planting this species in wildland settings or on roadsides should be strongly discouraged. Information on the invasive nature of this species should be shared with local citizens. Dried flower arrangements are popular and appropriate when used in the proper setting. However, once the arrangement is no longer useful, it should be placed in a trash receptacle or burned. It should not be tossed outside on the ground. Artificial flowers or live plants might be more appropriate for use in outdoor settings. Cleaning equipment and mowers when moving from one site to another is a good practice which helps prevent the spread of weeds including teasel from one site to another.

2. Mechanical Control

The known populations of this plant in Northern Arizona are small enough to be effectively controlled by digging or pulling. However, teasel seeds can remain viable for two or more years. For effective eradication follow-up visits to the sites of infestation would be needed for several years. Removal of the flower stalks before flowering is another method of control. Stalks should be cut during the full bud stage of the flower to prevent the formation of seeds. Cutting the stalks prior to that will result in the formation of new flowering stalks. If stalks are cut after the flowers are already open they should be removed from the site. The seeds will continue to ripen and seeds can fall from the ripened stalks. The flower stalks must be cut for several years to control teasel. Late spring burning is another method of controlling the teasel if the infestation is not too dense and can also be combined with other methods. The green rosettes are easier to find in grassy areas if a spring burn has occurred and the grasses are blackened. The rosettes are then easier to remove by digging or pulling.

3. Chemical Control: *Noted here are chemical control techniques in use in other areas. Always check with weed specialists or chemical suppliers to ensure correct dosage and application. Mention of these products does not imply endorsement by the Northern Arizona Weed Council, San Francisco Peaks Weed Management Area, the USDA Forest Service, nor the Nature Conservancy. Currently the use of herbicides is not allowed on lands administered by the Coconino, Kaibab and Prescott National Forests. Always check with your local land manager before using herbicides on public lands*

Triclopyr can be applied to the foliage during growing season. It is most effective if applied before the plants have bolted. Bolting is a rapid growth of a plant's flowering stalk. This usually occurs in the spring or early summer. After bolting, the plant usually flowers and then produces seed. If herbicides are used after the plants have bolted, there is some risk of seed formation. These seeds would then be available in the seed bank to form another generation of teasel plants. Glyphosphate is effective if applied to the plants before bolting. Glyphosphate can also be used on the rosettes in the fall. Photosynthesis must be occurring in the plants for the Glyphosphate to be effective but teasel rosettes often remain green late into the fall after other plants go dormant. The dormancy of surrounding plants can be beneficial, allowing for easier location of teasel rosettes.

4. Biological Control: *(No exotic species should be introduced into an ecosystem without extensive research into the long-term effects. Mention of the species below does not imply appropriateness for use in Northern Arizona.)*

There are currently no biological control organisms available for use on teasels.

5. Integrated Control

Burning and chopping can be combined for control of teasel in the spring. Teasel rosettes can be found more easily when looked for in areas where the grass has been blackened by fire. Mechanical removal of any remaining rosettes and mature plants after herbicide treatment might also be effective and would reduce the need for additional treatment.

Species Management Plan Common Teasel *Dipsacus fullonum*

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Teasel has become a widespread weed in many parts of the country. It has spread rapidly through the northwest in wet areas such as drainage ditches and irrigation canals. Teal can form large monocultures in areas where it grows. The area around the base of the mature plant becomes bare ground as a result of death of the rosette. This area provides an excellent “nursery” for the next generation of plants.

Teasel is often used in dried flower arrangements and this may help contribute to its spread around populated areas. Dried flowers are sometimes discarded outside after use. This can be a potential for introduction of several species included in dried flower arrangements if the seeds are mature. Activities such as mowing and highway maintenance can contribute to the spread of teasel where it occurs along roadways.

Status: Teasel is not currently recognized as a noxious weed on the Coconino, Kaibab and Prescott National Forests list, Arizona Noxious Weed List or on the Federal Noxious Weed List. However, this is an invasive exotic plant and should be considered when preparing Noxious Weed Management Plans.

Known Locations:

Currently there are only a few known isolated populations of teasel in Northern Arizona. One of these is within the city of Flagstaff in drainage behind a mobile home park and another group of plants at Apron Tank

Impacts: Common teasel (*Dipsacus fullonum*) and a related species, cut-leaved teasel (*D. laciniatus*) have rapidly expanded in other areas of the country. Dramatic increases in the range of both common and cut leaved teasel have been seen in the Midwest states. In some of these areas teasel plants sometimes occurs in prairies, savannas, and meadows. In Oregon the plants are found in many areas including meadows and drainage ditches. Currently, the known groups of teasel are small and cover limited areas. However, these or other unknown populations could expand into larger areas and impact native communities through plant competition.

Control:

1. Cultural Control

Prevention of more introductions of this into native ecosystems will help control it. Planting this species in wild land settings or on roadsides should be strongly discouraged. **Information** on the invasive nature of this species should be shared with local citizens. Dried flower arrangements are popular and appropriate when used in the proper setting. However, once the arrangement is no longer useful, it should be placed in a trash receptacle or burned. It should not be tossed outside on the ground. Artificial flowers or live plants might be more appropriate for use in outdoor settings.

Cleaning of road equipment and mowers when moving from one site to another is a good practice which helps prevent the spread of weeds including teasel from one site to another.

2. Mechanical Control

The known populations of this plant in Northern Arizona are small enough to be effectively controlled by **digging or pulling**. However; teasel seeds can remain viable for two or more years. For effective eradication follow-up visits to the sites of infestation would be needed for several years.

Removal of the flower stalks just before flowering is another method of control. Stalks should be cut during the full bud stage of the flower to prevent the formation of seeds. Cutting the stalks prior to that will result in the formation of new flowering stalks. If stalks are cut after the flowers are already open they should be removed from the site. The seeds will continue to ripen and seeds can fall from the ripened stalks. The flower stalks must be cut for several years to control teasel.

Late spring **burning** is another method of controlling the teasel if the infestation is not too dense. . It can also be combined with other methods. The green rosettes are easier to find in grassy areas if a spring burn has occurred and the grasses are blackened.

3. Chemical Control: *Noted here are chemical control techniques in use in other areas. Always check with weed specialists or chemical suppliers to ensure correct dosage and application. Mention of these products does not imply endorsement by the Northern Arizona Weed Council, San Francisco Peaks Weed Management Area, the USDA Forest Service, nor the Nature Conservancy. Currently the use of herbicides is not allowed on lands administered by the Coconino, Kaibab and Prescott National Forests. Always check with your local land manager before using herbicides on public lands*

Triclopyr can be applied to the foliage during growing season. It is most effective if applied before the plants have bolted. If herbicides are used after the plants have bolted, there is some risk of seed formation.

Glyphosphate is effective if applied to the plants before bolting. If herbicides are used after the plants have bolted, there is some risk of seed formation. Glyphosphate can also be used on the rosettes in the fall. Photosynthesis must be occurring in the plants for the Glyphosphate to be effective but teasel rosettes often remain green late into the fall after other plants go dormant.

4. Biological Control

There are currently no biological control organisms available for use on teasels.

5. Integrated Control

Burning and chopping can be combined for control of teasel in the spring. Teasel rosettes can be found more easily when looked for in areas where the grass has been blackened by fire.

Mechanical removal of rosettes and remaining mature plants after **herbicide treatment** might also be effective and would reduce the need for additional treatment

References:

Arizona Noxious Weed List, Plant Services Division, Arizona Department of Agriculture, Phoenix, AZ

Griffith, Sara. April 7, 1998. Weed Programs in Oregon. *Dipsacus fullonum* (teasel)
<http://www.css.orst.edu/weeds/Teasel/Teasel.htm>

Phillips, B.G., Daavid Lutz and Debra Crisp 1997 Noxious Weed List for Coconino, Kaibab and Prescott National Forests. On file at Forest Supervisors Office, Coconino National Forest.

Southwest Mapping Program, SWEMP 2000 Invasive Plants Species List.

http://www.usgs.nau.edu/swemp/Info_pages/plants/list_rev.htm

USDA Animal and Plants Health Inspection Service Plant Protection and Quarantine.
Insects, Mites, and Nematodes Introduced for Biological Control of Weeds in the United States: An Expedite List. Revised May 6, 1999.

<http://www.aphis.usda.gov/ppq/bats/weedagen.htm>

USDA Animal and Plants Health Inspection Service Federal Noxious Weed List. . Plant Protection and Quarantine. <http://www.aphis.usda.gov/ppq/bats/fnwsbycat-e.html>

Wisconsin Department of Natural Resources. Common Teasel (*Dipsacus sylvestris*) and Cut-leaved Teasel (*Dipsacus laciniatus*)

<http://www.dnr.state.wi.us/org/land/er/invasive/factsheets/teasel.htm>

Moser, L; D. Crisp. San Francisco Peaks Weed Management Area fact sheet on *Dipsacus fullonum*. Coconino National Forest.